What is claimed is:

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1. A camera, comprising:

a first lens;

a second lens;

a photo-electric converting element to receive a light incoming from a subject image through said first lens and said second lens, and to convert said light into image signals;

a driving member to move said first lens and said second lens in an optical path; and

guiding means for guiding said second lens moved by said driving member so that a distance between said photo-electric converting element and said second lens changes stepwise.

2. The camera of claim 1,

wherein both a focal length changing operation and a focus adjustment are performed by means of said driving member.

3. The camera of claim 1,

wherein said driving member selectively moves said second lens to one of a plurality of predetermined positions of said guiding means during said focal length changing operation.

4. The camera of claim 3,

wherein said guiding means has a cam groove.

5. The camera of claim 1, further comprising:

a display for displaying images based on said image signals.

6. The camera of claim 1,

said guiding means, comprising:

first guiding means for conducting said focal length changing operation by guiding said second lens in said optical path so as to trace a first predetermined locus in relative to said first lens; and

second guiding means for conducting said focus adjustment by guiding said second lens in said optical path so as to trace a second predetermined locus, which is different from said first predetermined locus, in relative to said first lens, wherein said second guiding means are located on an extension of said first guiding means in such a manner that said first guiding means and said second guiding means are staggered on said guiding means.

7. The camera of claim 1,

wherein said driving member moves said second lens on said guiding means during both a focal length changing operation and a focus adjustment.

8. The camera of claim 1,

wherein said driving member is a single member to drive both said first lens and said second lens.

9. The camera of claim 3,

wherein said driving member is a cam barrel in which cam grooves are formed stepwise on inner surface of said cam barrel.

10. The camera of claim 3, further comprising:

ranging means for measuring a distance between said camera and said subject to output a ranging signal;

a first image processor to output a first image data generated by processing said image signals which are converted from said subject image, said subject image being received by said photo-electric converting element when said second lens is located at a first position of said plurality of predetermined positions; and

a second image processor to output a second image data generated by processing said first image data on the basis of said ranging signal.

11. The camera of claim 10,

wherein said second image processor applies a magnification change processing to said first image data.

12. The camera of claim 10, further comprising:

a calculator to calculate an image magnification factor, which varies between before and after said focus adjustment, on the basis of said ranging signal and information designating said first position, wherein said second image processor applies a magnification change processing to said first image data on the basis of said image magnification factor.

13. The camera of claim 11, further comprising:

memory means for memorizing a plurality of image magnification factors which correspond to said plurality of predetermined positions and said ranging signals, wherein said second image processor selects an image magnification factor, corresponding to said ranging signal and information designating said first position, out of a plurality of said

image magnification factors memorized in said memory means, and then, said second image processor applies a magnification change processing to said first image data on the basis of said image magnification factor selected by said second image processor.

14. The camera of claim 10, further comprising:

an image display for displaying an image based on said image signals converted by said photo-electric converting element, wherein said focus adjustment and an image capturing are performed after said image display displays images based on said second image data.

15. The camera of claim 10,

wherein said second image processor performs a processing for extracting at least a part of said first image data to generate said second image data.

16. The camera of claim 15, further comprising:

a calculator to calculate an image magnification factor, which varies between before and after said focus adjustment, on the basis of said ranging signal and information designating said first position, wherein said second image processor applies a grouping processing to a peripheral region

of said first image data on the basis of said image magnification factor to generate said second image data.

17. The camera of claim 10,

wherein said driving member moves said second lens from one of said plurality of predetermined positions on said guiding means in such a direction that an image frame reduces, during said focus adjustment.

18. The camera of claim 10,

wherein a position of a maximum image frame in each of predetermined variable power regions is located at each of said plurality of predetermined positions.

19. The camera of claim 15,

wherein said driving member moves said second lens from one of said plurality of predetermined positions on said guiding means in such a direction that an image frame reduces, during said focus adjustment.

20. The camera of claim 15,

wherein a position of a maximum image frame in each of predetermined variable power regions is located at each of said plurality of predetermined positions.

21. The camera of claim 1,

wherein said driving member is capable of moving said second lens to a storing region located at a position nearer said photo-electric converting element than a position of the shortest focal length, and image capturing is not performed when said second lens is located at said storing region.

22. The camera of claim 16,

wherein said grouping processing performed by said second image processor is to superpose a predetermined window frame on a peripheral region of an image based on said first image data.

23. The camera of claim 16,

wherein said grouping processing performed by said second image processor is to superpose a predetermined color region and/or pattern region on a peripheral region of an image based on said first image data.

24. The camera of claim 10, further comprising:

a display for appropriately displaying images based on said first image data, said second image data and a third

image data which is outputted by said first image processor after said focus adjustment

25. The camera of claim 24, further comprising:

a memory for memorizing said third image data.

26. The camera of claim 10, further comprising:

an exposure section to expose a silver-halide film, wherein said light incoming from a subject image through said first lens and said second lens is divided into a first light and a second light, said first light is introduced to said photo-electric converting element while said second light is introduced to said exposure section.

27. The camera of claim 3, further comprising:

a discriminator for discriminating whether said second lens is moved to a first region of said guiding means or is moved to a second region of said guiding means by said driving member; and

an image processing section to output a first image data based on said image signals if said discriminator determines that said second lens is moved to said first region, and to output a second image data generated by applying a magnification change processing to said image signals based on

a predetermined zooming magnification factor if said discriminator determines that said second lens is moved to said second region.

28. The camera of claim 27, further comprising:

a memory for memorizing said zooming magnification factors, wherein said memory memorizes a plurality of zooming magnification factors which correspond to positions to which said second lens is moved.

29. The camera of claim 27, further comprising:

a display for displaying images based on said image signals, wherein said display displays images based on said first image data or said second image data during a focal length changing operation.

30. The camera of claim 27,

wherein an image processing is not performed in said first region, while an image processing is performed in said second region

31. The camera of claim 27,

wherein said discriminator discriminates whether said second lens is moved to a first region of said guiding means

or is moved to a second region of said guiding means by said driving member during a focal length changing operation, and said image processing section outputs either said first image data or said second image data, based on said image signals obtained after focus adjustment.

32. The camera of claim 3, further comprising:

a discriminator for discriminating whether said second lens is moved to a first region of said guiding means or is moved to a second region of said guiding means by said driving member; and

an image processing section to output a first image data based on said image signals before focus adjustment if said discriminator determines that said second lens is moved to said first region, and to output a second image data generated by applying a magnification change processing to said image signals based on a predetermined zooming magnification factor before focus adjustment if said discriminator determines that said second lens is moved to said second region.

33. The camera of claim 32, further comprising:

a memory for memorizing said zooming magnification factor, wherein said memory means memorizes a plurality of

zooming magnification factors which correspond to positions to which said second lens is moved.

34. The camera of claim 32, further comprising:

a display for displaying images based on said image signals, wherein said display displays images based on said first image data or said second image data before a focal length changing operation.

35. The camera of claim 27, further comprising:

ranging means for measuring a distance between said camera and said subject to output a ranging signal, wherein said image processing section outputs said first image data based on said image signals, which are obtained after performing a focus adjustment on the basis of said ranging signal from a predetermined reference position, when said discriminator determines that said second lens is moved to said first region, and outputs a second image data generated by applying a magnification change processing to said image signals, which are obtained after performing a focus adjustment on the basis of said ranging signal from a predetermined reference position, based on predetermined zooming magnification factors, when said discriminator

determines that said second lens is moved to said second region.

36. The camera of claim 32, further comprising:

ranging means for measuring a distance between said camera and said subject to output a ranging signal, wherein said image processing section outputs said first image data based on said image signals, which are obtained after performing a focus adjustment on the basis of said ranging signal from a predetermined reference position, when said discriminator determines that said second lens is moved to said first region, or to output a second image data generated by applying a magnification change processing to said image signals, which are obtained after performing a focus adjustment on the basis of said ranging signal from a predetermined reference position, based on predetermined zooming magnification factors, when said discriminator determines that said second lens is moved to said second region.

37. The camera of claim 1,

wherein said guiding means guides said second lens moved by said driving member so that a distance between a focal

surface of said photo-electric converting element and said second lens changes stepwise.

38. An image capturing apparatus being characterized in that said image capturing apparatus is provided with:

a zoom lens in which a variable power operation in a plurality of predetermined variable power regions and a focus adjustment in each of said variable power regions are performed by means of a driving action of single component driving member;

ranging means for measuring a distance between said image capturing apparatus and a subject;

a calculator to calculate an image magnification factor, which varies between before and after said focus adjustment, from a ranging signal of said ranging means and a variable power information designating a selected variable power region of said zoom lens;

a photo-electric converting element to receive a subject image by means of said zoom lens, and to convert said subject image into image signals;

a first image processor for outputting a first image data generated by processing said image signals before said focus adjustment; and

a second image processor for outputting a second image data generated by applying a magnification change processing to said first image data based on a calculation result of said calculator.

39. An image capturing apparatus being characterized in that said image capturing apparatus is provided with:

a zoom lens in which a variable power operation in a plurality of predetermined variable power regions and a focus adjustment in each of said variable power regions are performed by means of a driving action of single component driving member;

ranging means for measuring a distance between said image capturing apparatus and a subject;

a calculator to calculate an image magnification factor, which varies between before and after said focus adjustment, from a ranging signal of said ranging means and a variable power information designating a selected variable power region of said zoom lens;

a photo-electric converting element to receive a subject image by means of said zoom lens, and to convert said subject image into image signals;

a first image processor for outputting a first image data generated by processing said image signals before said focus adjustment; and

a second image processor for outputting a second image data generated by applying a grouping processing to a peripheral region of said first image data based on a calculation result of said calculator.

40. An image capturing apparatus being characterized in that said image capturing apparatus is provided with:

a zoom lens in which both a zooming operation and a focusing operation are performed by means of a driving action of single component driving member, and which is driven to either a first region in which a image processing is not performed, or a second region in which a image processing is performed;

a discriminator for discriminating whether said zoom lens is moved to said first region or is moved to said second region;

a photo-electric converting element to receive a subject image incoming through said zoom lens, and to convert said subject image into image signals; and

an image processing section to output a first image data based on said image signals when said discriminator determines

that said zoom lens is moved to said first region, or to output a second image data generated by applying a magnification change processing to said image signals based on predetermined zooming magnification factors when said discriminator determines that said zoom lens is moved to said second region.

41. An image capturing apparatus being characterized in that said image capturing apparatus is provided with:

a zoom lens in which both a zooming operation and a focusing operation are performed by means of a driving action of single component driving member, and which is driven to either a first region in which a image processing is not performed during said focusing operation, or a second region in which a image processing is performed during said focusing operation;

a discriminator for discriminating whether said zoom lens is moved to said first region or is moved to said second region;

a photo-electric converting element to receive a subject image incoming through said zoom lens, and to convert said subject image into image signals; and

an image processing section to output a first image data based on said image signals when said discriminator determines

that said zoom lens is moved to said first region, or to output a second image data generated by applying a magnification change processing to said image signals based on predetermined zooming magnification factors when said discriminator determines that said zoom lens is moved to said second region.

42. The camera of claim 2,

wherein said focal length changing operation is a zooming operation, and said focus adjustment is a focusing operation.